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VHF POWER PENTODE MINIATURE TYPE

MINIATURE TIPE
GENERAL DATA
Electrical:
Filament, Coated:
Filament Arrangement Series* Parallel**
Voltage 6.0 ± 10% 3.0 ± 10% ac or dc volt
Current 0.23 0.46 am Direct Interelectrode Capacitances:
Grid No.1 to Plate 0.24
Input 7.0
Output 5.0
O With no externa) shield.
Mechanical:
Mounting Position Vertical, or Horizontal with pin
No.1 & No.5 in a horizontal plan Maximum Overall Length
Maximum Seated Length 2-3/8
Length from Base Seat to Bulb Top (excluding tip) 2" ± 3/32
Maximum Diameter
Bulb
Basing Designation for BOTTOM VIEW
Pin 1 - Filament (-) 4 5 Pin 5 - Filament
Pin 2-Plate Pin 3-Grid No.2 Wid-Tap Pin 6-Grid No.1
Die 4 Grid No 3
Int. Shield
0
AF POWER AMPLIFIER & MODULATOR-Class A1
Maximum ICAS Ratings, Absolute Values;
DC PLATE VOLTAGE
DC GRID-No.2 (SCREEN) VOLTAGE 125 max. volt: GRID-No.2 INPUT 2 max. watt
PLATE DISSIPATION 5 max. watt
Typical Operation:
Filament Arrangement Series* Parallel**
DC Plate Voltage
DC Grid-No.3 Voltage 0* 0** volt
DC Grid-No.2 Voltage 75 75 volts
DC Grid-No.1 (Control- Grid) Voltage*8 -8 volt:
Peak AF Grid-No.1-to-
Grid-No.1 Voltage 8 8 volt
*,**,





VHF POWER PENTODE

Max.—Signal DC Plate Current 1.5 20.5 mm Ax.—Signal DC Grid—No.2 Current 1.5 2.0 mm Max.—Signal DC Grid—No.2 Current 3.5 4.5 mm Transconductance					
Max.—Signal DC Plate Current . 17.5 20.5 m Zero—Signal DC Grid—No.2 Current 1.5 2.0 m Max.—Signal DC Grid—No.2 Current 3.5 4.5 m Transconductance	7 Sissal DC Plate Current		16	19	ma
Zero-Signal DC Grid-No.2 Current 1.5 2.0 m MaxSignal DC Grid-No.2 Current 3.5 4.5 m MaxSignal DC Grid-No.2 Current 3.5 4.5 m Transconductance	Zero-Signal DC Plate Current .	•			
Max.—Signal DC Grid—No.2 Current 3.5 4.5 m Transconductance	vax -Signal DC Plate Current .	:			
Transconductance	Zero-Signal DC Grid-No.2 Curre	nt			
Effective Load Resistance	MaxSignal DC Grid-No.2 Curre	nt			
(plate to plate) 12000 12000 ohm			3500	3500	µmhos
Total Harmonic Distortion. 10 10 Max.—Signal Power Output . 1.2 1.4 watt Circuit Values: Grid—No.1—Circuit Resistance			12000	12000	ohms
Max.—Signal Power Output . 1.2 1.4 watt Circuit Values: Grid—No.1—Circuit Resistance		-			%
Circuit Values: Grid-No.1-Circuit Resistance					
Grid-No.1-Circuit Resistance	MaxSignal Power Output	•	1.2	1.4	watts
RF POWER AMPLIFIER & OSCILLATOR—Class C Telegraphy DD and RF POWER AMPLIFIER—Class C FM Telephony Maximum ICAS® Ratings, Absolute Values: DC PLATE VOLTAGE	Circuit Values:		,		
RF POWER AMPLIFIER & OSCILLATOR—Class C Telegraphy and RF POWER AMPLIFIER—Class C FM Telephony Maximum ICAS® Ratings, Absolute Values: DC PLATE VOLTAGE	Grid-No 1-Circuit Resistance .				
## Applications Approx. Approx.	di la mort art megretame		1	100000 max.	ohms
## POWER AMPLIFIER—Class C FM Telephony Naximum ICAS® Ratings, Absolute Values: 300 max. volt	DE DOWED AMPLIETED & OSCII	LATOR-	_Class	C Telegraphy	00
Maximum ICAS®® Ratings, Absolute Values: 300 max. volt DC PLATE VOLTAGE	RE FOWER AMPLIFIER & OSCIE	ind	01403	o lologiaphy	
DC PLATE VOLTAGE DC GRID-No.2 (SCREEN) VOLTAGE. 125 max. volt DC GRID-No.1 (CONTROL-GRID) VOLTAGE. 125 max. volt DC PLATE CURRENT DC GRID-No.1 CURRENT DC GRID-No.1 CURRENT Typical Input. Typical Operation: DC Plate Voltage DC Plate Voltage DC Grid-No.2 Voltage DC Grid-No.2 Voltage DC Grid-No.1 Voltage DC Grid-No.1 Voltage DC Grid-No.1 Voltage DC Plate Current DC Plate Current DC Grid-No.1 Current (Approx.) DC Grid-No.1 Cu	RF POWER AMPLIFIER-	Class	C FM T	elephony	
DC PLATE VOLTAGE	Maximum ICAS ** Ratings. Absolu	te Val	ues:		
DC GRID—No.2 (SCREEN) VOLTAGE				300 max.	valts
DC GRID-Mo.1 (CONTROL-GRID) VOLTAGE					volts
DC PLATE CURRENT	DC GRID-NO.2 (SCREEN) VOLTAGE.	TACE.			
DC GRID—No.1 CURRENT		ILIAGE.			
PLATE INPUT					
GRID-No.2 INPUT	DC GRID-No.1 CURRENT				ma
GRID-No.2 INPUT. 2 max. watt PLATE DISSIPATION. 5 max. watt Typical Operation: Up to 40 Mc 80 Mc DC Plate Voltage . 300 0 volt DC Grid-No.3 Voltage				7.5 max.	watts
PLATE DISSIPATION				2 max.	watts
## Ac ## Ac				5 max.	watts
DC Plate Voltage	Tunion! Conration: 8		llh to	At	
DC Grid-No.2 Voltage DC Grid-No.2 Voltage DC Grid-No.1 Voltage DC Grid-No.1 Voltage DC Grid-No.1 Voltage Peak RF Grid-No.1 Voltage DC Grid-No.1 Voltage Feak RF Grid-No.1 Voltage DC Plate Current DC Grid-No.2 Current DC Grid-No.1 Current (Approx.)	Typical operation.			80 Mc	
DC Grid-No.2 Voltage DC Grid-No.2 Voltage DC Grid-No.1 Voltage DC Grid-No.1 Voltage DC Grid-No.1 Voltage Peak RF Grid-No.1 Voltage DC Grid-No.1 Voltage Feak RF Grid-No.1 Voltage DC Plate Current DC Grid-No.2 Current DC Grid-No.1 Current (Approx.)	DC D1-4- W-14		300	300	volts
DC Grid-No.2 Voltage To To To To To To To T	DC Catal Na 2 Valtage	•			volts
DC Grid—No.2 Voltage 32000 32000 ohm		٠. ر			volts
DC Grid-No.1 Voltage - 45	DC Grid-No.2 Voltage ^D	{			
DC Grid-No.1 Voltage	•	l	-		-
Peak RF Grid-No.1 Voltage		ſ			
Peak RF Grid-No.1 Voltage. 65 65 voltage. DC Plate Current . 25 25 m DC Grid-No.2 Current . 7 7 n DC Grid-No.1 Current (Approx.) 1.5 1.5 n Driving Power (Approx.) 0.2 0.3 wat Power Output (Approx.) 5.4 5.2 wat Circuit Values:	DC Grid-No.1 Voltage	{	/		
DC Plate Current		1	1400		ohm:
DC Plate Current	Peak RF Grid-No.1 Voltage		65		volt
DC Grid-No.2 Current			25	25	ma
DC Grid-No.1 Current (Approx.) . 1.5 1.5 m Driving Power (Approx.) 0.2 0.3 wat Power Output (Approx.) 5.4 5.2 wat Circuit Values:			7	7	ma
Driving Power (Approx.) 0.2 0.3 wat Power Output (Approx.) • 5.4 5.2 wat: Circuit Values:		}		1.5	m
Circuit Values: Sold Mark Sold Mark	De Grid-No.1 Current (Approx.)	, .			wat
Circuit Values:	Driving Power (Approx.).	• •			watt
Gold No. 1 Circuit Popistance 5000 min. ohr	Power Output (Approx.)	• •	J.7	0.1	
	Circuit Values:				
Grid-No.1-Circuit Resistance 100000 max. ohr	Cold No. 1 Cincult Posictors		ſ		ohm
	Grid-No.1-Circuit Resistance		1	100000 max.	ohm
Useful power output is approximately 5.0 watts for 40 Mc and 4.5 wat		**** 6 4	n watte	for NO Mc and A	5 watt
for 80 Mc.	for 80 Mc.	cery J.	o marco		
* ** •• 🗅 🗅 🗷 🗯 😁 . See next page.	# ## ● D DO # ■ 0 See next page				

OCTOBER 15, 1947

TENTATIVE DATA 1



VHF POWER PENTODE

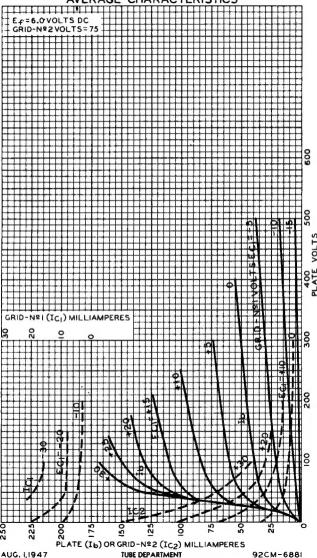
56/8

	FREQUENCY MULTIPLIER	
Max	mum ICAS Ratings, Absolute Values:	
DC DC DC DC PL	RID-No.2 (SCREEN) VOLTAGE	olts olts olts ma ma atts atts
Ту	cal Operation: Doubler Tripler to 80 Nc to 80 Nc	
DC DC	rid-No.3 Voltage ^a 0 0 v rid-No.2 Voltage ^a { 75 75 v 41000 41000 v rid-No.1 Voltage ^a	olts olts olts ohms olts
Per DC DC DC Dr	RF Grid—No.1 Voltage 160	ohms oits ma ma ma watt atts
Cir	uit Values:	
Gr	-No.1-Circuit Resistance $\left\{ egin{array}{ll} 5000 \ \text{min.} \\ 100000 \ \text{max.} \end{array} \right.$	ohms ohms
*	seful power output is approximately 3.5 watts for doubler service 7 watts for tripler operation.	and
*	or series filament arrangement, filament voltage is applied bei ins No.1 and No.7. The grid—No.1 voltage isreferred to pin No.1, id—No.3 (pin No.4) is connected to pin No.1.	ween
**	or narallel filament arrangement, filament voltage is applied bet	
	or parallel filament arrangement, filament voltage is applied be in No.5 and pins No.1 and No.7 connected together. The grid- oltage is referred to pin No.5 and grid No.3 (pin No.4) is conne pin No.5.	ween No. 1 ected
••	o pin No.5. htermittent Commercial and Amateur Service.	ween No. 1 ected
	o pin No.5. ntermittent Commercial and Amateur Service. or do filament supply. otained from afixed supply or by agrid-No.1 resistor (30000) or o	
•	opin No.5. termittent Commercial and Amateur Service. or dc filament supply. otained from a fixed supply or by agrid—No.1 resistor (30000) or of the resistor (1400). tained from a separate source, or from the plate voltage supply voltage divider. Series screen resistor of value shown shoulsed only where the 5618 is employed as a buffer amplifier and is	ath- with
0	o pin No.5. Intermittent Commercial and Amateur Service. For dc filament supply. Stained from a fixed supply or by a grid-No.1 resistor (30000) or of the resistor (1400). Stained from a separate source, or from the plate voltage supply voltage divider. Series screen resistor of value shown should seed only where the 5618 is employed as a buffer amplifier and is year.	with d be not
	opin No.5. termittent Commercial and Amateur Service. or dc filament supply. otained from a fixed supply or by agrid—No.1 resistor (30000) or of the resistor (1400). tained from a separate source, or from the plate voltage supply voltage divider. Series screen resistor of value shown shoulsed only where the 5618 is employed as a buffer amplifier and is	with d be; not ation dio-

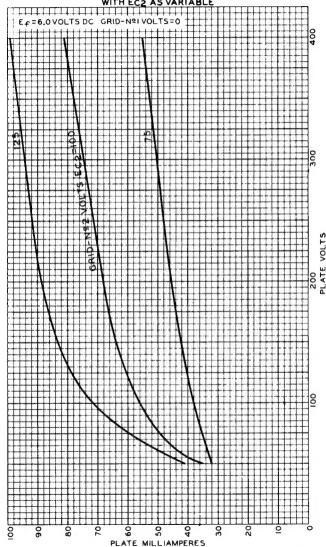




AVERAGE CHARACTERISTICS



AVERAGE PLATE CHARACTERISTICS
WITH ECZ AS VARIABLE



5618